

## METHOD OF CONTROLLING THE FLOW IN A FLOW SYSTEM

### ABSTRACT

A method and flow system for controlling the flow of a liquid  
5 in a flow system, the liquid flow comprising particles and being led into a  
channel thereof. The method comprises the steps of enveloping the liquid  
flow by a flow of carrier liquid, hydrodynamically focussing the particles in  
the liquid flow providing a measurement signal of the liquid flow from an  
observation area in the channel, and dividing the liquid flow at a branching  
10 point into two or more outlets in response to the measurement signal. The  
division of the liquid comprises introducing a control liquid from at least one  
control channel at a merging point or merging area in the channel. The  
amount of control liquid is controlled by at least one electro-kinetic pump, the  
pump effect of which is controlled in response to the measurement signal.